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09/851,361	05/08/2001	Robert E. Novak	50588/22	2394

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Vulcan, Inc. C/O Stoel Rives LLP
201 S. Main St., Ste 1100
Salt Lake City, UT 84111

EXAMINER	
PENG, FRED H	

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2426	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/851,361	NOVAK, ROBERT E.	
	Examiner	Art Unit	
	FRED PENG	2426	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 June 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-16,18-20 and 30-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-16,18-20 and 30-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 May 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-6, 8-16, 18-20 and 30-39 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6, 8-16, 18-20 and 30-39 rejected under 35 U.S.C. 103(a) as being unpatentable over Safadi et al (US 2005/0289617) in view of Reitmeter (US 6,118,498).

Claims 1, 11, 30 and 31, Safadi discloses a set top box (STB) for decoding audio/video streams from multiple sources (Fig.1; Para 27), the STB comprising:

a processor (104) coupled to a communication bus (112, 101; Para 41 lines 20-22);

a hardware decoder (103), coupled to the processor, for decoding audio/video streams;

a first stream receiver (202) configured to receive a first audio/video media stream from a first source, the first audio/video signal comprising a television signal (Para 37);

a second stream receiver (203, 101) configured to receive a second audio/video stream from a second source, the second audio/video stream comprising Internet Protocol (IP) encapsulated audio/video data, and the second source comprising an IP Source (Para 41), wherein the second stream receiver is configured to communicate the IP encapsulated audio/video data through the communication bus to the processor, and wherein the processor is configured to extract the second audio video stream from the IP encapsulated audio video data (Para 41 line 6 from last to last; DOCSIS tuner/modem communicates with CPU);

Safadi further discloses selectively directing one of the first audio/video stream and the second audio/video stream to the hardware decoder under control of the processor and wherein

the hardware decoder is configured to decode the selected output so as to convert the television signal and the IP encapsulated audio/video data from an originally compressed state as provided by the first source and the second source, respectively (Para 19 lines 4-7; Para 38 lines 6-8; Para 44; Para 47; selected channel from either tuners of television or internet for watching is decoded through video/audio decoder 103).

Safadi discloses selection of first stream and second stream from a processor for decoding but is not explicit about a stream selector comprising first and second inputs, a select line and an output for two input streams selection.

In an analogous art, Reitmeter discloses a stream selector comprising first and second inputs, a select line and an output for two input streams selection for further decoding (FIG.1, 40; Col 4 lines 43-49).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Safadi to include a stream selector comprising first and second inputs, a select line and an output for two input streams selection, as taught by Reitmeter to take advantage of hardware implementation to reduce the latency of channel changing inherent in software implementation.

Claims 2 and 12, Safadi further discloses wherein the audio/video stream comprises a Moving Picture Experts Group (MPEG) stream (Para 47), and wherein the hardware decoder comprises an MPEG decoder (Fig.1, element 103).

Claims 3 and 13, Safadi further discloses wherein the first stream receiver comprises a video tuner (Fig.1, element 202).

Claims 4 and 14, Safadi further discloses wherein the first source comprises a cable television source (Fig. 1, element 204).

Claims 5, 6, 15 and 16, Safadi further discloses wherein the second stream receiver comprises a modem device/Data Over Cable Service Interface Specification (DOCSiS) modem (FIG.1, element 101).

Claims 8 and 18, Safadi further discloses wherein the stream selector (Fig.1) comprises a multiplexer (Elements 104, 112 act as a multiplexer to multiplex multiple inputs to an output such as TV output or PVR recording) comprising the select line coupled to the processor.

Claims 9 and 19, Safadi further discloses (Fig.1) an audio/video controller (element 103) coupled to the hardware decoder (103) for formatting media streams for presentation by an external display device (element 119; Para 38 lines 6-10); and

an output (103) coupled to the hardware decoder for providing operable connection to the external display device (inherently has an output coupled to the hardware decoder for connection to display device).

Claims 10 and 20, Safadi further discloses (Fig.1) a storage device (106), coupled to the processor, for storing at least one media of the first audio/video stream and the second audio/video stream.

Claim 32, Safadi is silent about comprising a radio-frequency input coupled to a splitter, and the splitter comprises a first output coupled to the first processing path and a second output coupled to the second processing path.

Official Note is taken that a splitter is well known in the art to split an input to multiple outputs for multiple input connections.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Safadi to have a splitter integrated within the receiver as a

common and economical way to split signals to multiple destinations from a single source like cable.

Claim 33, Safadi further discloses a modem device/Data Over Cable Service Interface Specification (DOCSiS) modem (FIG.1, element 101).

Claim 34, Safadi further discloses wherein the decoder comprises a hardware-based decoder (Fig. 1, element 103).

Claim 35, Safadi further discloses wherein the multiplexed video signal and the streaming video signal are both encoded using a same technique (MPEG; Para 47), and wherein the decoder includes capability to decode signals encoded using the same technique (see Fig. 1 with MPEG decoder).

Claim 36, Safadi further discloses wherein the same technique comprises an MPEG encoding technique (MPEG; Para 47).

Claim 37, Safadi does not explicitly disclose wherein the same technique comprises a Digicypher encoding technique.

Official Notice is taken that video is compressed using various digital compression techniques, i.e., Digicypher, is well known in the art for compressed video and audio images to be transmitted over high bandwidth channels.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Safadi to encode data with Digicypher scheme so to take the advantage of transmitting compressed data over high-speed bandwidth channel, i.e., satellite beside of CATV network.

Claim 38, Safadi further discloses wherein the receiver is integrated with a set top box (Fig. 1).

Claim 39, Safadi does not disclose wherein the receiver is integrated with a television set.

Official Notice is taken that integrating the receiver within a TV is well known in the art for simplification purpose.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to integrate Safadi receiver within a TV so to reduce cost and simplify manufacturing process. Moreover, allow user to have a compact TV device.

Response to Arguments

4. Applicant's arguments filed 06/03/2009 have been fully considered but they are not persuasive.

In reference to Applicant's arguments

(a) Safadi and Reitmeier, either individually or when combined, fail to teach or suggest using a processor to extract an IP encapsulated media stream, and then selectively providing the extracted media stream to the same hardware decoder used to decode television signals from another source. ….To the contrary, Safadi teaches using the CPU 104 to decode and otherwise process the information. See, e.g., paragraph [0035] (indicating that the CPU 104 transcodes (discussed below) streaming audiovisual data and performs other functions such as playing and recording audiovisual programming using necessary player software).

Examiner's response

(a) The Examiner respectfully disagrees with Applicant's arguments. Safadi in view of Reitmeier discloses the data transport stream from the DOCSIS tuner 203 is provided to a DOCSIS modem101 where the transport stream is demodulated. The demodulated transport stream then is sent to the CPU 104 over the system bus 112 (FIG.1; Para 41, the last 5 lines).

The CPU then would inherently extract the IP encapsulated media stream before decoding. The extracted IP media stream then is selected for hardware decoding at decoder 103 before viewing 119 by the user (Para 42 - Para 49; for cases a through d, if the decrypted signal is to be watched, it is processed by the decoder 103).

Even though Safadi teaches using the CPU to perform transcoding, this extra function performed by the CPU does not contradict with or prevent the notations of using a shared hardware decoder to perform decoding function for a selected IP media stream for viewing while doing transcoding for recording for a primary channel (as evidenced from Para 44 and Para 47 that a clear digital signal, which can be from secondary tuner, is selected for viewing and is processed by the decoder 103; and, as indicated by Safadi, transcoding is mainly for recording purposes to save storage space; therefore, can be run simultaneously).

Furthermore, the flow diagram as shown in FIG.1 indicates that all the video streams are required to pass through the decoder section 103 before output for viewing suggests the hardware decoder 103 is shared by all the video sources including the television signal and the second audio/video stream extracted from the IP encapsulated audio/video data from an originally compressed state as provided by the first source and the second source, respectively.

In reference to Applicant's arguments

(b) Thus, Safadi fails to teach or suggest wherein the hardware decoder is configured to decode the selected output from the stream selector so as to convert the first audio/video stream comprising the television signal and the second audio/video stream extracted from the IP encapsulated audio/video data from an originally compressed state as provided by the first source and the second source, respectively.

Examiner's response

(b) These arguments have been responded as in section (a). When viewer selects a IP signal from a secondary tuner for viewing, the selected IP stream is decoded through the decoder 103 from an originally compressed state as provided by the first source and the second source, respectively (Para 42 – Para 49).

Conclusion

5. The prior art of record and not relied upon is considered pertinent to applicant's disclosure.

- Shimomura (US 2005/0169255)

6. Claims 1-6, 8-16, 18-20 and 30-39 are rejected.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRED PENG whose telephone number is (571)270-1147. The examiner can normally be reached on Monday-Friday 09:30-19:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hirl can be reached on (571) 272-3685. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fhp

/Joseph P. Hirl/
Supervisory Patent Examiner, Art Unit 2426
August 11, 2009